Report of the Inter-Municipal Task Force on Community Choice Aggregation

Within the communities of

Amherst, Massachusetts Pelham, Massachusetts Northampton, Massachusetts

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Prepared by

The Community Choice Aggregation Inter-Municipal Task Force Members:

Amherst, MA
Northampton, MA
Pelham, MA
Pioneer Valley Planning Commission
UMass Clean Energy Extension
Western Massachusetts Community Choice Energy







Table of Contents

Key Terms, Appreviations and Acronyms	2
Executive Summary	4
1. Introduction	6
1.1 Purpose of this Report	6
2. Overview of Municipal Aggregation Law	6
3. Summary of CCA Task Force and CCA Models	7
3.1 What is Community Choice Aggregation?	7
3.2 Inter-Municipal CCA and Task Force Origin	9
3.3 Massachusetts CCA Innovators of Interest	10
4. Vision for CCA 3.0 in Amherst, Pelham, and Northampton	13
4.1 CCA 3.0 Problem-Opportunity Statement	13
4.2 CCA 3.0 Vision Statement	13
4.3 CCA 3.0 Objectives	14
4.4 Low-income and Moderate-Income Populations	14
5. Current Status of CCA in Partnership Municipalities	14
5.1 Amherst	14
5.2 Northampton	15
5.2 Pelham	15
6. Process Ahead, Key Decisions, and Timeline	15
6.1 Municipal Approvals to Authorize Municipality to Develop Municipal Aggregation	15
6.2 Submit Plan to DPU for Approval	16
6.3 Detailed Business Plan and Budget	16
6.4 Joint Powers Agreement/Entity	17
6.5 Startup and Roll Out of Programs	17
6.6 Program Budget Considerations	17
6.7 Proposed Timeline	18
7. Task Force Recommendations	18
Appendix A – Amherst 100% Renewable Energy Resolution	19
Appendix B – Northampton CCA and JPE Authorization Order	21
Appendix C – Pelham CCA Authorizing Article	22

Key Terms, Abbreviations and Acronyms

Term/Abbreviation/Acronym	Meaning				
Adder	A customer fee sometimes associated with a Municipal Aggregation (see below).				
Additionality	Additionality is evidence that a purchase of renewable electricity helped add more renewable energy to the grid, rather than simply fulfilling the amount required under the Renewable Portfolio Standard (see below). Renewable Energy Credits (see below) that are retired, or taken off the market, cannot be used to satisfy the RPS so are considered <i>additional</i> .				
CCA	Community Choice Aggregation is an entity or organization that develops and operates energy related programs and projects on behalf of a member community.				
CEE	UMass Clean Energy Extension				
DER	Distributed Energy Resources. Renewable and efficient technologies that provide energy at or near the point of consumption.				
DOER	Massachusetts Department of Energy Resources				
DPU	Massachusetts Department of Public Utilities				
GHG	Greenhouse Gas				
JPA	Joint Powers Agreement				
JPE	Joint Powers Entity				
kWh	Kilowatt-Hour. The primary unit that is used to price the sale of electricity.				
mil	One-tenth of one cent (i.e., \$0.001)				
Municipal Aggregation	The statutory mandate that allows municipalities, solely or in groups, to become the buyer of electricity for customers within its jurisdiction on an opt-out basis. The details and powers of the statutory authority of aggregations vary slightly by state.				
PV	Photovoltaic				
REC	Renewable Energy Credit. A virtual attribute of renewable energy sold to encourage investment in renewables.				
REC, Class 1	Renewable energy certifications sources from qualified New Renewable Generation Units. New Renewable Generation Units are facilities that began commercial operation after 1997 and generate electricity using any of the following technologies: solar, wind, small hydropower,				

Term/Abbreviation/Acronym	Meaning
	landfill and anaerobic digester methane, marine or hydrokinetic, geothermal and eligible biomass fuel.
REC, Retired	A retired REC is one that is voluntarily taken off the market. See <i>Additionality</i> .
RPS	Renewable Portfolio Standard. A law that requires the electric companies to increase the percentage of renewable energy sources on the grid annually.
TF	Inter-Municipal Task Force on Community Choice Aggregation
The Compact	The Cape Light Compact
USDN	Urban Sustainability Directors Network
WMACCE	Western Mass Community Choice Energy. A group of residents promoting CCA 3.0.

Executive Summary

Amherst, Northampton and Pelham share a commitment to act on the threats of climate change. That shared commitment led to the formation of an Inter-Municipal Task Force on Community Choice Aggregation (CCA) in the spring of 2018. The Task Force's stated charge was to consider the feasibility, risks, opportunities, and potential effectiveness of using the state's existing municipal aggregation law to reduce greenhouse gas (GHG) emissions in the participating communities, and recommend whether to proceed. The Task Force subsequently added second-level CCA evaluation criteria, namely, that any potential CCA structure contribute to community resiliency, equity, localization, additionality, sustainability, and economic development objectives. Upon formation, the Task Force was comprised of representatives from all three communities, members from the Western Mass Community Choice Energy steering committee, UMass Clean Energy Extension staff — and was later joined by a Pioneer Valley Planning Commission staff member.

During the past 18 months, the Task Force has engaged in extensive CCA research and, with the generous assistance of other municipalities, industry experts, and outside funders, gained significant clarity on many aspects of CCA structures and processes. One key takeaway is that CCAs can take a variety of forms and perform diverse functions, ranging from simple to complex and small to large. In its simplest form a CCA procures electricity supply on behalf of a community, identical to what the utilities deliver under their basic service rate structure. This model was defined by the Task Force as the CCA 1.0 model. Most of the dozens of Massachusetts CCAs start and remain at this stage of development. However, some CCAs procure power from specific renewable energy producers as a greener option, generally from projects located out-of-state. The Task Force refers to these programs as CCA 2.0. Finally, a CCA can be structured as an entity that develops and operates local energy efficiency and renewable distributed energy programs and projects that contribute to a carbon-free, localized, equitable, and sustainable energy future. We refer to this model as CCA 3.0. The figure below illustrates the potential distinctions between CCA 1.0, 2.0, and 3.0 as defined by the Task Force. (Note that others may use the terms CCA 1.0, CCA 2.0, and CCA 3.0 differently than the Task Force.)



To better understand public interest, questions, and concerns regarding forming a potential intermunicipal CCA, the Task Force also undertook a public outreach and education effort in the three participating communities. This outreach took the form of community forums, presentations, and Q&A sessions, as well as one-on-one meetings with city/town policymakers. The response to outreach efforts has been largely favorable. Northampton has reached a strong consensus to move forward on a CCA 3.0 effort that is optimized around GHGs emissions — and City Council has given the Mayor authority to create

a CCA, either independently or with other municipalities. The Pelham 2018 Spring Town Meeting also passed a municipal aggregation authorizing article. Amherst — delayed by its transition to a new governmental structure — is expected to vote on municipal aggregation authorization soon.

While there remain some unknowns that will be further explored and clarified going forward, the results of the Task Force's research to date suggests that pursuing and implementing a CCA 3.0 model is not only feasible but that in doing so, the participating municipalities are likely to realize significant primary and secondary benefits, including:

- Reduced greenhouse gas emissions
- Competitive and more stable long-term electric rates
- Local economic development opportunities
- Broader and more equitable access to clean energy resources and their benefits
- Greater social awareness of, and engagement with, our energy resources and issues
- A more resilient local energy system
- More livable and sustainable communities

When all communities approve authorization, the three municipalities will prepare a common high-level municipal aggregation plan to submit to the Department of Public Utilities (DPU) for approval. The plan is typically drafted by a consultant in consultation with the state's Department of Energy Resources, as required by statute. In parallel with the aggregation plan development and submittal to the DPU, the participating municipalities will arrange for the development and vetting of a thorough and detailed intermunicipal CCA 3.0 business plan. Key CCA 3.0 design aspects and decisions in the business plan will address questions of how the aggregation would be administered and staffed, how energy contracts would be procured, equitable and efficient use of revenues, and how public oversight of the aggregation will be implemented. After the basic high-level CCA plan has been approved by the DPU, and the detailed business plan has been prepared with feedback from the community, the three municipalities will each approve the business plan prior to commencing the aggregation.

The Task Force also recognizes that the participating municipalities will need to enter into a formal agreement to join together and exercise the powers and duties associated with the joint CCA. Eventually, this agreement may be in the form of a Joint Powers Agreement. If so decided by the municipalities, a Joint Power Entity would be established to provide greater protections for the municipalities. The participating municipal governments will need to engage in discussion as to the best option forward, and prepare the necessary legal documents.

In summary, the Task Force recommends that Amherst, Northampton, and Pelham (and potentially other communities) form an inter-municipal aggregation under Massachusetts General Laws c. 164, § 134 and establish an associated entity with the primary purpose of reducing GHG emissions. Like any innovation that leads to change, the CCA 3.0 approach is not without risks and unknowns. The Task Force is confident that the risks can be mitigated through thoughtful business planning, expert input, ongoing public engagement, and careful oversight. Amherst, Pelham, and Northampton stand to not only benefit in many ways from implementation of the CCA 3.0 model but, in doing so, will create a replicable structure for other communities considering climate action, assume a leadership role in the fight for climate justice, and help build a new energy vision for our communities and the world.

1. Introduction

1.1 Purpose of this Report

The purpose of this report is to summarize the findings and recommendations of the Inter-Municipal Task Force (TF) on Community Choice Aggregation (CCA) developed since the time it was formally convened in the spring of 2018. Specifically, the report will provide:

- A description of the CCA primary and secondary goals
- Background and history of CCA in Massachusetts and nationally
- A summary of findings from the CCA industry consultants engaged by the TF
- A summary of the project timeline and next steps
- Recommendations of the TF to its constituent communities and decision-makers

2. Overview of Municipal Aggregation Law

Municipal aggregation in Massachusetts is authorized by Section 134 of Chapter 164 of the General Laws. Section 134 (a) provides that:

Any municipality or any group of municipalities acting together within the commonwealth is hereby authorized to aggregate the electrical load of interested electricity consumers within its boundaries; Such municipality or group of municipalities may group retail electricity customers to solicit bids, broker, and contract for electric power and energy services for such customers.

Any municipality wishing to start a municipal aggregation must obtain a vote from their town meeting or city council authorizing aggregation plan development. Upon authorization, the communities develop an aggregation plan, which must be reviewed by the citizens of the community and the state Department of Energy Resources (DOER), and then be approved by the state Department of Public Utilities (DPU).

The statute provides that municipal aggregation is "opt-out," meaning that eligible customers automatically become part of the aggregation unless they affirmatively choose not to. The communities must inform customers of their opt-out rights prior to enrollment. The statute requires that the communities allow customers to opt out without penalty any time within 180 days of being enrolled. In practice, all Massachusetts communities have allowed customers to opt out at any time without penalty.

Opt-out enrollment applies only to customers on utility *Basic Service*, not to customers served by competitive retail suppliers. In most Massachusetts communities, between 80% and 90% of residential customers are on Basic Service. Typically, 5% to 10% of those customers opt out of the municipal aggregation at the time of program launch. As a result, most Massachusetts municipal aggregations are serving more than 75% of residential customers in the community. Most large commercial and industrial customers are served by retail competitive suppliers and are not automatically included.

The DPU has provided a more detailed structure for municipal aggregations through a series of orders approving aggregation plans. Among other issues, the DPU has focused on the clarity and comprehensiveness of the notices provided to customers. In particular, the DPU has called out unsubstantiated claims of future savings by some communities, and required that communities inform customers that savings cannot be guaranteed.

While the DPU carefully reviews communities' notices to customers, the DPU does not regulate the prices charged. The DPU does, of course, regulate utility distribution rates. However, the DPU views municipal aggregation prices as fundamentally different because customers can choose whether to participate or not. Since distribution services are monopoly services (the customer has no choice in their provider), rate regulation is necessary. But rate regulation is not needed for competitive services such as those provided by municipal aggregations. If a customer does not like the prices charged, the customer can simply switch to basic service or to a competitive supplier.

Section (b)2 of the municipal aggregation statute allows communities to go beyond providing retail electricity supply and to take control of the energy efficiency funds collected through distribution rates. These are the funds used by utility distribution companies to administer energy efficiency programs such as Mass Save®. With authorization, communities can take the place of the utility and become the administrator of the efficiency programs offered within their jurisdictional boundaries.

In order to gain access to the funds, the municipality must adopt an energy plan that details how it will implement the programs in a manner that is consistent with statewide goals. That plan must be approved by the DPU.

A community administration of efficiency programs is subject to a much higher level of DPU regulation than the community's provision of electricity supply. The key distinction is the source of the funds. As discussed above, electricity supply is a competitive service; customers can choose to pay the municipal aggregation's supply prices or not. As a result, the need for DPU regulation is limited. The efficiency funds, however, are collected through monopoly distribution rates. Customers have no choice about whether to pay those charges. Accordingly, the DPU provides rigorous oversight of the collection and use of the funds.

Currently, only one Massachusetts municipal aggregation, the Cape Light Compact, is implementing energy efficiency programs. The City of Lowell has requested, but not yet been granted, permission to do so.

In addition to the energy efficiency funds, Section (b) also authorizes communities to take control of the renewable energy funds that are collected through distribution rates. These funds are administered by the Massachusetts Clean Energy Center, a state agency. The process for obtaining the renewable energy funds is similar to the process for obtaining the energy efficiency funds. The amount of money available is much smaller; about 5% of the energy efficiency funding. To date, no communities have sought control of renewable energy funds.

3. Summary of CCA Task Force and CCA Models

3.1 What is Community Choice Aggregation?

Community Choice Aggregation (CCA) is a term in common use that means different things to different people. As noted in Section 2, Massachusetts General Law Chapter 164 Section 134 (Load Aggregation Programs), which authorizes municipalities to "aggregate the electrical load of interested electricity consumers within its boundaries" uses the term "municipal load aggregation", but does not refer to community choice.

Based on the statute, *municipal aggregation* is a set of programs that procure electricity on behalf of electricity consumers, and optionally may operate the Mass Save® program and renewable energy programs using ratepayer funds. These programs are regulated and overseen by the DPU.

The term CCA has been in use for years and for most of that time was synonymous with "Municipal Aggregation." In the twenty plus years since municipal aggregation was introduced to Massachusetts, it has grown and evolved in other states, particularly California. California includes the term "Community Choice" in its enabling statute and establishes a much broader vision of what CCA may incorporate. In recent years Massachusetts advocates have expanded the use of CCA along the lines of the "California Model."

As CCA has no legal definition in Massachusetts, the TF thinks of a CCA as an entity or organization that develops and operates energy related programs and projects. This includes municipal electricity aggregation, demand side management, and renewable energy programs, as defined by statute. However, a CCA can be much more. Over time a CCA can become a potent organization dedicated to climate change mitigation and GHG reductions with a multi-dimensional framework incorporating a local and regional focus; social, environmental, and economic equity; increased community resilience, and energy democracy.

CCAs can take a variety of forms and perform diverse functions ranging from simple to complex and small to large. While we see these CCAs as a continuum, we have defined several benchmarks to aid our discussions. In its simplest form a CCA is synonymous with municipal aggregation procuring electricity supply that is identical to what the utilities deliver under basic service. The TF calls this CCA 1.0. Many Massachusetts CCAs start and some remain at this stage of development.

Many CCAs in the state have moved beyond the basic CCA 1.0 to offer electricity from the grid with more renewable carbon free content than required by the Renewable Portfolio Standard (RPS). Most of these CCAs accomplish this by purchasing renewable energy credits (RECs), either regionally or nationally sourced, with various impacts on GHG emissions. Sometimes these "greener" options are included in the base offering and sometimes at an opt-up premium price. A few CCAs acquire power or RECS from specific renewable energy producers. The TF refers to these programs as CCA 2.0.

At the other end of the spectrum a CCA can be a complex organization developing and operating energy efficiency and renewable distributed energy programs and projects that move us toward a carbon free, localized, democratized, and sustainable energy future. We refer to this as CCA 3.0. Many California CCAs are developing in this direction. Only Cape Light Compact approaches this end of the spectrum In Massachusetts. Precisely how a CCA 3.0 is structured and operated depends upon local values, priorities, and resources.

It should be noted that some use the term CCA 3.0 very differently than the way it is understood and used by the TF in this report. Some use the term to describe a multitude of services in addition to electricity supply, renewable energy generation, and energy efficiency. They include a variety of ancillary and ambitious programs related to electric vehicles, consumer energy cooperatives, and natural gas. Our TF is not intending to achieve such goals with the local CCA program we envision. The following figure illustrates the distinctions between CCA 1.0, 2.0, and 3.0 as defined by the TF.



It is the TF's recommendation to create a CCA that allows a rapid evolution to the CCA 3.0 model to allow a quick start and maximize GHG reductions and climate change mitigation.

3.2 Inter-Municipal CCA and Task Force Origin

This initiative began in the spring of 2017 when Paul Fenn, the principal author of Massachusetts' Municipal Aggregation statute, delivered several presentations in Pioneer Valley communities. Mr. Fenn described his work helping California craft its Community Choice Aggregation (CCA) law and his vision for how CCA could help communities take more control of their energy future and as a tool to fight climate change.

A group of attendees decided to meet and discuss the potential for CCA in the Valley. This group of residents from a number of local communities coalesced into Western Mass Community Choice Energy (WMACCE). WMACCE met weekly for more than a year, exploring the merits, structure, and operations of CCA. The group studied reports and papers on the topic and interviewed staff and officials from CCAs in California, New York, and the Cape Light Compact.

After determining that CCA has the potential to deliver significant benefits, WMACCE decided to ask several communities to explore forming a joint CCA. WMACCE members decided to start small to allow time to learn and establish the CCA with the intention of adding communities over time. WMACCE approached Northampton, Amherst, and Pelham based on their environmental record and each municipality passing resolutions supporting renewable energy and climate change mitigation.

WMACCE approached the UMass Clean Energy Extension (CEE) for help researching topics. CEE conducted a study of Massachusetts municipal aggregations, which among other things demonstrated that CCAs do not extensively reduce ratepayer costs. WMACCE members delivered presentations and met with municipal officials and staff to both inform and gauge interest in the municipalities. All three governments expressed interest and the Mayor of Northampton invited his counterparts in Amherst and Pelham to form an ad hoc Inter-Municipal TF to further investigate the merits and feasibility of forming a joint CCA.

The TF would recommend to the member communities whether or not to proceed to collaborate on an inter-municipal aggregation plan for submission to the DPU.

The TF convened in the spring of 2018. The TF was composed of representatives from all three communities, members from the WMACCE steering committee, CEE staff, and later joined by a Pioneer Valley Planning Commission (PVPC) staff member. At its formational meeting, TF members agreed that the joint CCA primary goal would be reducing GHG emissions. Over time the TF identified second-level goals: resiliency, equity, localization, additionality, sustainability, and economic development.

With Northampton as the lead agency, the TF, along with other USDN communities, received a grant from the Urban Sustainability Directors Network (USDN) to hire consultants to address questions beyond TF members' expertise. The TF selected Peregrine Energy Group and Local Power to research these questions. The final report from this project is expected in early 2020. However, interim reports from the consultants provided sufficient information for the TF to reach a consensus to recommend developing a plan for a joint CCA. The TF is currently investigating the logistics, timeline, and financial requirements of the process.

Pelham and Northampton have passed the statutorily required authorization to develop the aggregation plan for submission to DPU. Amherst – delayed by its transition to a new governmental structure – is expected to vote on authorization soon.

3.3 Massachusetts CCA Innovators of Interest

Cape Light Compact

The Cape Light Compact (the Compact) is the oldest municipal aggregation/CCA program in the United States. In 1997, The Compact formed under an Intergovernmental Agreement between 12 Cape Cod towns; with the three remaining Cape towns and all six Martha's Vineyard towns joining in 1998 (all before the Compact commenced operations).

In July 2017, the Compact reorganized as a Joint Powers Entity (JPE), under the Act Modernizing Municipal Finance and Government, allowing for it to be its own separate legal entity. This protects the member communities from liability exposure and enhances financial accountability. Each member of the JPE appoints a director to serve on the JPE's board of directors. The JPE is also a public employer, and the board of directors may hire staff to carry out the purposes of the JPE. Subject to certain limitations, the board of directors must also appoint a treasurer and business officer for the JPE. The Compact performs the same substantive functions under the JPE as it did under its prior Intergovernmental Agreement.

The Compact was formed to advance the interests of consumers in the newly restructured electric industry resulting from the 1997 Massachusetts Restructuring Act. Consumers needed to aggregate to gain the benefits of competitive electric supply markets; and local governments were natural aggregators, provided non-discriminatory access and established competitive bidding procedures. Moreover, municipal aggregation facilitated the advancement of local efforts to achieve environmental protection and energy efficiency goals.

In 2001, under separate DPU approvals, the Compact began 1) supplying electric power to all of its aggregation customers and 2) operating the Energy Efficiency Program previously provided by Commonwealth Electric (now Eversource) on behalf of all Cape and Vineyard residents and businesses.

The purpose of operating the Energy Efficiency program was to ensure that the \$5 million that Cape and Vineyard electric consumers paid into energy efficiency funds (in 2001) on their bills each year under a state-mandated charge would be utilized on the Cape and Martha's Vineyard. The program would also eliminate shareholder incentives from being deducted from energy efficiency funds. The elimination of shareholder incentives assured that the funds remain solely focused on energy efficiency program services. To make a smooth transition, the Compact hired many of the same vendors who served standard utility programs, but it also included a number of innovative local features and was soon recognized as an award-winning effort. With the passage of the 2008 Green Communities Act, the Compact began administering the Commonwealth's Three-Year Energy Efficiency Plan, often referred to as Mass Save.

From 2002 to the present, the Compact's Energy Efficiency Program has won several national and state awards, saving consumers on Cape Cod and Martha's Vineyard more than \$485 million, with the expectation that they will realize more than \$1 billion in lifetime benefits. Under the Energy Efficiency Program, the Compact has established a program to switch out 14,000 street lights to high-efficiency LEDs, at no cost to the towns, with annual savings of \$500,000 anticipated through reductions in annual maintenance and operating costs.

In addition, the compact employs its own staff to administer its power supply (a.k.a., municipal aggregation) program, which currently serves approximately 205,000 customers from all 21 towns on Cape Cod and Martha's Vineyard. When it comes time to arrange a new power supply contract with a competitive supplier (on average, every three to five years), the Compact contracts with both an energy consultant and an attorney for assistance with the power procurement process, which typically takes four to six weeks. By outsourcing discrete functions such as power procurement to third-party service providers on a flat/hourly fee-for-service basis, the Compact has realized significant savings compared to the costs it would have incurred by paying an energy broker a fixed fee for each kilowatt-hour (kWh) of electricity consumed by the Compact's customers. The Compact has utilized these savings to fund its internal administration costs, including staff salaries.

Through a competitive supplier, the Compact employs a power purchase strategy designed to achieve rates that parallel Eversource's Default Service rate as closely as possible, maintaining competitive rates that stabilize the Compact's customer base. While the Compact cannot guarantee lower rates than other providers, since its inception, the Compact's power supply program has saved its consumers more than \$4 million as compared to Eversource's basic service customer rate.

Currently, the Compact's default power supply program purchases an additional 1% of RPS-qualified MA Class I Renewable Energy Credits (RECs). RECs from newer projects built in New England, the purchase of which reduces the market supply of this type of REC, thus creating an additional incentive to develop new renewable energy generation facilities, or *additionality*, to meet the annually-increasing REC requirement for suppliers under the RPS. In addition, the Compact's default power supply program matches 100% of the Compact customers' annual electricity usage with non-Class I RECs purchased from Nextera Energy Services. Nextera in turn directs the resulting revenues into the EarthERA Renewable Energy Trust, a fund established by EarthERA LLC (an affiliate of NextEra Energy Services, the Compact's competitive supplier) for the purpose of developing renewable energy projects in the U.S.

The Compact also enables its power supply customers to choose whether to participate in supply programs that match annual electricity usage with a higher percentage (50% or 100%) of MA RPS-qualified

Class I RECs for an additional price premium, while retaining all of the aforementioned benefits of the Compact's default supply program. This opt-up option provides an outlet for customers who wish to spend more for greater support of local renewable energy supply without creating any additional price burden on customers who remain in the default program.

Importantly, the Compact's power supply program collects a small fee from its customers (\$0.001/kWh, a.k.a one mil) to fund local renewable energy programming for the customers' benefit. This programming has included a Solarize Our Schools campaign that installed solar panels on schools in all 21 member towns; creating the Cape and Vineyard Electric Cooperative, an investment that will yield more than \$60 million in benefits to the region over 20 years through 28 megawatts of new solar projects that were developed; and a Low Income Solar Revolving Grant Program. The latter funds 100% of the equipment and installation cost of solar photovoltaic (PV) systems on affordable housing projects to reduce electric bills for low-income homeowners and renters, serving the goals of equitability as well as benefiting the environment by increasing the amount of renewable electricity on the electric grid.

City of Cambridge

In June 2017, the City of Cambridge launched its municipal aggregation program (the Cambridge Community Electricity program) to bring the benefits of renewable energy and electricity choice to its residents and businesses. The program supports the development of new local solar renewable energy projects, in addition to offering the potential for savings, and a City-vetted alternative to Eversource's basic service and other electricity offers in the marketplace.

The Cambridge Community Electricity Program offers residents and businesses two electricity options: Standard Green and 100% Green Plus.

Standard Green participants receive the minimum amount of renewable energy required by the state, (New England Class I RECs). In addition, participants contribute directly to the development of a new solar project in Cambridge through a small \$0.002/kWh (i.e., two mils) charge that will result in additional renewable electricity over and above the state-required minimum, once the project is up and running. The contribution to the new solar project brings new renewable energy to the grid and can help displace fossil fuel power production.

100% Green Plus participants receive 100% renewable energy by having 100% Massachusetts Class I RECs purchased on their behalf. In addition, 100% Green Plus participants contribute directly to the development of new solar projects – located in and owned by Cambridge – through the same \$0.002/kWh charge as the Standard Green participants. RECs generated by these local projects are subsequently retired. The purchase of additional Class I RECs over and above the minimum required by the state of Massachusetts helps to create a stronger market for renewable energy generated by renewable energy projects in New England.

Nantucket

In March 2017, the Town of Nantucket launched its municipal aggregation program with the goal of providing electricity customers on Nantucket with competitive pricing and new choices in their electricity supply. Nantucket's default power supply program meets minimum requirements for renewable energy under MA's RPS. Nantucket's aggregation customers have the choice to opt up to a 100% green energy supply that comes primarily from regional and national wind projects.

In addition, Nantucket's aggregation program offers its customers a local solar rebate program intended to stimulate the adoption of solar energy systems on primary, residential properties located on Nantucket by providing rebates of up to \$4,000 to cover a portion of the costs of successfully-installed solar PV systems.

Nantucket's aggregation program is administered partly by a third-party energy consultant that charges a fixed fee of \$0.001/kWh (i.e., one mil) of electricity the aggregation consumes; and partly by a municipal Energy Manager whose responsibilities include assisting with the aggregation program. The aggregation program is allowed to charge its consumers an additional fee (a.k.a., "adder") of up to \$0.001/kWh of electricity consumed 1) to support operational costs like the time allocated by the Energy Manager, 2) to purchase RECs, and 3) for other forms of support for local energy projects that create benefits for program participants (e.g., the local solar rebate program). The \$0.001 adder equates to 80 cents per month for an average resident using 800kWh of electricity per month.¹

4. Vision for CCA 3.0 in Amherst, Pelham, and Northampton

4.1 CCA 3.0 Problem-Opportunity Statement

Many communities have a goal of 80% reduction in GHG emissions or carbon-neutrality by 2050, but state renewable energy portfolio mandates are not expanding rapidly enough to meet these goals. CCA municipal aggregation can serve as a powerful tool for municipalities to reduce GHG emissions. Currently, though, most municipal aggregation efforts outside of California and a few other municipalities, focus narrowly on procuring power from the grid. In some cases, CCAs include retail purchases of RECs (i.e., CCA 2.0). Even in these cases, they focus very little on developing local distributed energy resources (DER), including renewable energy supply, energy storage, and energy efficiency services. The TF's research suggests that pursuing and implementing a CCA 3.0 model will produce significant primary and secondary benefits for participating communities, including:

- Reduced greenhouse gas emissions
- Competitive and more stable long-term electric rates
- Local economic development opportunities
- Broader and more equitable access to clean energy resources and their benefits
- Greater social awareness of, and engagement with, our energy resources and issues
- A more resilient local energy system
- More livable and sustainable communities

4.2 CCA 3.0 Vision Statement

Vision Statement

Following is a CCA 3.0 vision statement developed by the TF:

Participating communities will achieve carbon neutrality and provide sustainable energy systems that distribute benefits equitably.

¹ https://www.nantucket-ma.gov/970/Local-SOLAR-Rebate-Program

Vision Statement Background

Renewable energy portfolios and local DER need to increase at faster rates to achieve a carbon-free energy supply and significant electrification of buildings and vehicles by 2050. CCA, in the eight states where it is legal (and the additional states currently considering enabling), helps to increase the amount of renewable energy supplied in the electric grid. Our examination of CCAs in Massachusetts identified extensive CCA adoption, but most CCAs focus on simple methods for increasing renewable energy portfolios with only one program (the Cape Light Compact) also addressing energy efficiency and only a few electric supply revenues for local renewables. We believe that we can go far beyond basic CCA with a broader focus on reducing GHG through such strategies as expanding local DER (generation and storage), engaging in wholesale energy purchases, and reducing peak loads and dirty peak generation, (CCA 3.0). Massachusetts, however, has few programs that have evolved beyond purchasing retail RECs and other low hanging fruit to realize the full potential of CCA 3.0. With assistance from our industry consultants, the TF has a clear understanding of how CCA 3.0 can work in Massachusetts and other states, building on lessons from existing CCAs and the most aggressive models in California and elsewhere. Further, it is essential that the core architecture of a CCA 3.0 model involve social equity and energy democracy from the start (see Section 4.4).

4.3 CCA 3.0 Objectives

The TF recommends that Amherst, Northampton, and Pelham (and potentially other communities) form an inter-municipal aggregation under Massachusetts General Laws c. 164, § 134 and establish an associated entity with the primary purpose of reducing GHG emissions. Under this arrangement, the Municipalities may realize secondary CCA 3.0 benefits, as noted above in Section 4.1.

4.4 Low-income and Moderate-Income Populations

Members of the TF have identified the importance of incorporating equity in the development of any CCA program. In most circumstances, home and business owners have direct and sole control over building energy use. Renters and those of low- and moderate-income are an overlooked segment of energy consumers who must be prioritized in CCA program development. Strategic efforts to engage this community sector will require more creative and direct outreach to support educating members on energy efficiency and incentivizing or subsidizing DER.

An equitable CCA program model will ensure that there is procedural equity and inclusion, and that benefits of programs and policies will result in a fair distribution of both benefits and burdens across all segments of a community that prioritizes those most in need. An equitable CCA program will also include structural equity that institutionalizes accountability, changing the dynamic of continued subordination of disadvantaged groups and incorporates decisions that consider generational impacts so as not to place undue burden on future generations.

5. Current Status of CCA in Partnership Municipalities

5.1 Amherst

Members of the Amherst contingent of WMACCE became interested in the California model of CCA after hearing about it from CCA consultant Paul Fenn, and got the ball rolling by providing CCA language in a November 2017 Town Meeting resolution, provided in **Appendix A**. The legislation enacted provided that the Town consider adopting CCA in joint action with other municipalities, that would 1) significantly

reduce energy demand, 2) develop the maximum possible amount of renewable DER to be sited, owned and used within the CCA community, and 3) provide rate stability and possible consumer cost savings.

Outreach to Community

Since passage of the resolution, WMACCE has provided outreach focused on Amherst, starting with two public forums in 2018, one at the Unitarian Universalist Society featuring a presentation by the Administrator of Cape Light Compact, and one at the Jewish Community Center featuring two CCA consultants comparing their models. In 2019, WMACCE hosted five community potlucks in Amherst, featuring slideshows and question and answer sessions.

Outreach to Town Councilmembers

Over the last 4-6 months, members of the TF provided individual or small group meetings with every Town Councilor, providing basic information and an opportunity to ask questions.

5.2 Northampton

Northampton has reached a strong consensus to move forward on a CCA that is optimized around reducing GHG emissions. City Council has given the Mayor authority to create a CCA, either independently or with other municipalities, and to enter into a Joint Powers Agreement (JPA) to create a Joint Powers Entity (JPE) with other municipalities. This allows Northampton to move forward as it figures out the best partnerships and to expand the program as new partners and opportunities come along. An initial program will almost certainly involve shorter term power purchase agreements and expand over time. Northampton's authorizing resolution is provided in **Appendix B**.

5.2 Pelham

Pelham initially authorized municipal aggregation at its October 29, 1998 Town Meeting, but never actually pursued power aggregation until the town submitted a plan to the DPU and was approved in 2017. Pelham was in the process of negotiating for a greener than the grid electricity supply when Selectboard members learned about a more robust approach to CCA developing in California and decided to explore this possibility before moving forward.

The Board of Selectmen asked the Energy Committee Chair to meet with residents from surrounding towns to explore this option. Based on the work of this group that grew into Western Mass Community Choice Energy, the Pelham 2018 Spring Town Meeting passed an authorizing article provided in **Appendix C**.

6. Process Ahead, Key Decisions, and Timeline

The process to establish a municipal aggregation in accordance with state laws and procedures is straightforward and outlined below. Additional process, planning, and decisions that are important for our proposed multi-municipal aggregation and community energy and GHG mitigation programs are also summarized.

6.1 Municipal Approvals to Authorize Municipality to Develop Municipal Aggregation

Each municipality must individually authorize the development of a municipal aggregation plan. As discussed above, both Northampton and Pelham have completed this step. Amherst must also provide this authority before the municipalities can jointly move forward. For Amherst, it is the TF's understanding

that the Town Council will need to provide authorization to the Town Manager to develop a municipal aggregation plan. This authorization does not require the Town Manager to develop a CCA, nor does it suggest that the Town Council would not have further input into the design of the program.

6.2 Submit Plan to DPU for Approval

When all communities approve authorization, the three communities will prepare a common high-level municipal aggregation plan to submit to the Department of Public Utilities (DPU) for approval. The plan is typically drafted by a consultant in consultation with the state DOER, as required by statute.

Senator Jo Comerford and Representative Mindy Domb added \$50,000 to the state budget at the request of the Towns of Amherst and Pelham. They intended these funds to advance the aggregation, for example to support a consultant, as necessary, to prepare our municipal aggregation plan and/or business plan (for all three municipalities).

6.3 Detailed Business Plan and Budget

Many program design details and a thorough business plan remains to be finalized. This effort will start in parallel to submitting the aggregation plan to the DPU. The key design aspects and decisions that have been discussed and assessed by the TF and consultants are summarized as follows.

Broker Model vs. Staff-administered Models

At the core of a municipal aggregation is the procurement of electricity for the aggregation from a competitive, licensed retail electric supplier in Massachusetts. Electricity is normally contracted for a three-year period, so this procurement is recurring.

Aggregations have typically used brokers to negotiate and procure electricity contracts on behalf of the municipality. For this work, brokers typically charge \$0.0075 to \$0.001/kWh. For Amherst, Northampton and Pelham aggregation, this fee paid by electricity consumers would be expected to amount to from \$135,000 to \$180,000 per year. The TF has explored options to reduce this cost so that more funds are potentially available to achieve local energy and GHG mitigation programs. Two options are to either 1) use CCA staff to internally broker the energy contracts, or 2) utilize an energy consultant on a fee-for-service basis to work with staff to broker the energy contracts every three years (this is the model used by Cape Light Compact). The TF also recognizes that the CCA could start with a broker model, and transition to a staff or consultant model after the first contract period. The TF has reached consensus that eventually a consultant or staff model will allow more productive programs.

Adders and Use of Revenues

The retail rate for electricity charged to CCA members includes the contracted energy rate, along with an optional customer fee, also referred to as an adder. In Massachusetts, adders typically range from less than \$0.001/kWh up to \$0.002/kWh (as mentioned earlier, each \$0.001/kWh adds about \$0.80 to an average residential monthly electric bill and collects about \$180,000 per year across the three municipalities). For our CCA, the TF suggests seeking DPU approval for an adder up to \$0.003/kWh – though the program would not likely start at this level, the higher adder would provide flexibility to implement local energy strategies.

The revenue from the adder will be used to support an energy broker/consultant fee (if needed), CCA staffing needs, and strategic energy initiatives. These programs will be further developed, but include

funds to pro-actively promote Mass Save® energy efficiency and electrification program adoption, strategic adoption of DER including solar, storage and demand response assets, targeted energy efficiency, and financing of community-driven, locally-owned solar PV.

Staffing and Budget

A CCA business plan will be developed and will provide details of the staffing and budget needs to administer the CCA on behalf of the three municipalities. Part- and full-time staffing or consultant positions and expected salaries will be described, along with a description and budget for external consultants and legal support and budget for program outreach and implementation. A business plan will establish and cost/revenue model for the CCA and be used to determine and justify the electric rate adder for the CCA and the opportunities for other revenue streams from program implementation through shared savings and project financing.

Municipal Plan Approval

After the basic high-level CCA plan has been approved by the DPU, and after the detailed business plan has been prepared with feedback from the community, the three municipalities will individually need to approve the plan, prior to commencing the aggregation.

6.4 Joint Powers Agreement/Entity

The TF also recognizes that the participating municipalities will need to enter into a formal agreement to join together and exercise the powers and duties associated with the joint CCA. Eventually, this agreement may be in the form of a Joint Powers Agreement. If so decided by the municipalities, a Joint Power Entity would be established to provide greater protections for the municipalities. The participating municipal governments will need to engage in discussion as to the best option forward, and prepare the necessary legal documents.

6.5 Startup and Roll Out of Programs

Once the program plan has been approved and the CCA legal organization and staffing have been established, the CCA will initiate startup and roll out. The program startup will involve development of the CCA staff and advisory board, and the competitive procurement of electricity from a licensed supplier. The municipal aggregation roll out requires outreach by mail and other means to inform all utility basic service customers of the switchover and their rights to opt-out of the aggregation. Further outreach to the community will follow on the CCA goals and strategic opportunities for energy savings and local distributed energy development.

6.6 Program Budget Considerations

CCA is revenue-based, not government-subsidized. The electric supply rates that consumers formerly paid to an investor-owned utility are bundled and redirected to support the CCA's bulk purchase of electricity and GHG reduction measures. CCA 3.0 can finance or incentivize energy efficiency and renewable energy development programs in several ways:

- Incentivizing and helping secure financing for local small scale renewable energy projects, including projects with planned transition to local ownership
- Enabling customers to buy shares in renewable energy generation assets sited in the communities

- Issuing revenue bonds tied to revenue streams of renewable energy or efficiency projects
- Accessing grant funding
- Utilizing revenue from a customer fee (a.k.a., adder) that could be used to support an energy broker/consultant fee (if needed), CCA staffing needs, and strategic energy initiatives

Depending on the model chosen, however, there may be organizational and consulting start-up costs that might need to be funded by a combination of an existing state grant (Acts of 2019) and municipal funding and/or loans.

6.7 Proposed Timeline

There are many steps in realizing a CCA as described in this report. The TF has estimated that the approval process by the Department of Public Utilities could take between six and twelve months. The CCA could launch as early as spring of 2021, or fall of 2021 or later, depending on the timing of state approval. The timeline below identifies the responsible parties for each step as shown in the key.

Dec 2019	WINTER 2020	SPRING 2020	SUMMER 2020	DEC 2020 - JUNE 2021 Af	fter DPU Approval
Task Force Re	eport				
Amherst TC A	uthorization				
	Identify funds for const	ultant(s), hire			
	Create inter-governmen	ntal agreement			
	Write plan, work with D	OER			
		Approval of plan by	required municipal	entities	
			Submit plan to DPI	U, answer questions	
			Consultan	t prepares business plan	
Responsible p	sible parties: Approval by DPU		J		
Blue = Task F	Task Force Request bids for		equest bids for supply		
Green = Muni	cipalities				Opt Out Period
Purple = CCA					CCA Launch!

7. Task Force Recommendations

The TF unanimously recommends to its respective communities that they continue to advance the CCA 3.0 model as described here, following the steps and processes described above. Specifically, the TF recommends that Amherst, Northampton, and Pelham (and potentially other communities) form an intermunicipal aggregation under Massachusetts General Laws c. 164, § 134 and establish an associated entity with the primary purpose of reducing GHG emissions. Under this arrangement, the Municipalities may realize secondary CCA 3.0 benefits, including:

- Reduced greenhouse gas emissions
- Competitive and more stable long-term electric rates
- Local economic development opportunities
- Broader and more equitable access to clean energy resources and their benefits
- Greater social awareness of, and engagement with, our energy resources and issues
- A more resilient local energy system
- More livable and sustainable communities

The TF also recommends that the scope of the existing TF expands to support the municipalities in moving the development of the CCA through the process outlined in Section 6.7 until such time as the CCA is established.

Appendix A – Amherst 100% Renewable Energy Resolution

The following resolution, authorizing consideration of Community Choice Aggregation, was passed unanimously by the Amherst Fall 2017 Town Meeting:

Article #16 - RESOLUTION IN SUPPORT OF 100 PERCENT RENEWABLE ENERGY

To see if the Town will vote to adopt the resolution in support of 100 percent renewable energy:

WHEREAS, too much of Massachusetts' energy comes from fossil fuels that pollute our air and water and damage our climate, and Massachusetts communities are already feeling the impacts of global warming; and,

WHEREAS, the Town of Amherst is already actively reducing its carbon emissions and promoting clean energy, by taking actions including energy efficiency upgrades in municipal buildings and street lights, running a highly successful Solarize Amherst program, using electric vehicles and installing public EV charging stations; and

WHEREAS, clean energy has brought many benefits to Massachusetts, including reduced pollution, tens of thousands of clean energy jobs, and more of our energy dollars retained in the local economy; and

WHEREAS, Massachusetts has historically been a leader in the fight against global warming, has a responsibility to continue to set a positive example for other states and countries to follow, and has the ability to get 100 percent of its energy from clean, renewable sources by harnessing its abundant solar and wind resources, and taking advantage of innovations in energy efficiency, green transportation, energy storage, and other technologies; and

WHEREAS, the transition to 100 percent renewable energy should promote employment opportunities and economic growth in our communities, facilitate local control and ownership over energy options, and bring tangible benefits to low-income residents and others who have historically been disadvantaged by our energy system;

NOW, THEREFORE, BE IT RESOLVED by Town Meeting in the Town of Amherst in the County of Hampshire, Commonwealth of Massachusetts, that Massachusetts should commit to a goal of 100 percent clean, renewable energy, and move as quickly as possible to achieve that goal;

AND BE IT FURTHER RESOLVED that leaders in the Legislature and statewide elected and appointed officials are urged to support legislation that would bring Massachusetts to 100 percent renewable energy, and ensure that the benefits of renewable energy are realized by Massachusetts residents from all walks of life;

AND BE IT FURTHER RESOLVED that the Town of Amherst and its staff will consider all municipal decisions in light of whether they will bring the Town and its residents, businesses, and institutions closer to 100 percent renewable energy;

AND BE IT FURTHER RESOLVED that the Town of Amherst will avoid taking actions that could increase the use of fossil fuels or delay the transition to 100 percent renewable energy;

AND BE IT FURTHER RESOLVED that the Town of Amherst will strive to take actions to promote clean energy and reduce fossil fuel use, including

- Continued ENERGY EFFICIENCY UPGRADES in municipal buildings
- Promotion of ENERGY EFFICIENCY upgrades in private homes and businesses
- Consideration of commencing a Community Choice Aggregation (or "CCA") program pursuant to G. L. c. 164, § 134 in joint action with other municipalities, to
- o purchase additional class 1 RECS above that required by the Renewable Portfolio Standard; and
- o adopt a comprehensive energy plan that would:
 - significantly reduce energy demand through electrification and the use of energy efficiency products and services and energy conservation measures;
 - develop the maximum possible amount of renewable distributed energy resources to be sited, owned and used within the CCA community; and
 - provide rate stability and possible consumer cost savings through bulk purchasing.

Appendix B – Northampton CCA and JPE Authorization Order

City of Northampton

MASSACHUSETTS

In City Council, September 19, 2019

Upon the recommendation of Mayor David J. Narkewicz, Planning & Sustainability, Central Services, and the Energy and Sustainability Commission

19.138 An Order To authorize Community Choice Aggregation to reduce Greenhouse Gas Emissions

- WHEREAS, Massachusetts authorizes municipalities to "aggregate the electric load of interested electric consumers within its boundaries" to provide competitive electric supplies (MGL Chapter 164 Section 134), commonly known as Community Choice Aggregation (CCA);
- WHEREAS, Over 145 Massachusetts municipalities have adopted some form of CCA;
- WHEREAS, On October 12, 2012, City Council authorized the city to participate in a CCA through the former Hampshire Council of Governments to allow a greening of the city's electric supply and encourage energy conservation and renewable energy;
- WHEREAS, The City, in cooperation with Amherst and Pelham, the University of Massachusetts Clean Energy Extension, the Urban Sustainability Directors Network (USDN), and six other municipalities around Massachusetts and the United States, has been studying how a CCA can provide competitive electric supplies while prioritizing a reduction in greenhouse gas (GHG) emissions;
- WHEREAS, The City, through its Planning & Sustainability and in cooperation with Central Services and outside partners, obtained a grant from USDN to hire outside consultants to study the most effective ways that a CCA can reduce greenhouse gas emissions ("CCA 3.0");
- WHEREAS, The draft Northampton Climate Resiliency and Regeneration Plan identifies CCA as a critical strategy (a high impact practice) to reduce greenhouse gas emissions;
- WHEREAS, Any Northampton CCA would have dual priorities of procurement of maintaining competitive electric rates and maximizing greenhouse gas emission reductions.

Ordered, that

The Mayor is authorized to obtain the necessary data, plans, applications, and regulatory approvals for Community Choice Aggregation (CCA), independently or in joint action with other municipalities, implement CCA, and enter into Joint Powers Agreements with other entities for joint CCAs.

Appendix C – Pelham CCA Authorizing Article

The following CCA authorizing article was passed at the Pelham 2018 Spring Town Meeting:

Resolution to Reduce Greenhouse Gas Emissions Using Municipal Electric Aggregation, also known as Community Choice Energy, to Improve Energy Efficiency and Develop Local Renewable Energy Generation

Whereas the Fall 1998 Pelham Town Meeting, pursuant to MGL Chapter 164 Section 134, voted to grant the Board of Selectmen authority to develop and participate in a contract, or contracts, for power supply and other related services, independently, or in joint action with other towns, and;

Whereas the town of Pelham has been invited by the City of Northampton to explore forming a joint Community Choice Energy organization initially comprising Northampton, Amherst, and Pelham, and;

Whereas residents of the Town of Pelham have a substantial environmental and social interest in reducing greenhouse gas emissions from the generation of electricity, and;

Whereas residential electricity customers in the Town of Pelham are interested in the possibility of reducing and stabilizing electric bills and in expanding energy services;

Be it therefore resolved, pursuant to M.G.L. c. 164, § 134, that the Town Meeting of Pelham authorizes the Board of Selectmen to act in partnership with other municipalities to form an inter-municipal task force to develop a plan to be approved by the Pelham Town Meeting for an inter-municipal Community Choice Energy organization that will:

- Contract for and develop electric supply and other related services for Pelham electricity consumers. Individual consumers would retain the option not to participate and to choose an alternate service.
- Develop and implement a comprehensive energy plan to:
 - Provide energy efficiency services
 - Develop local renewable and other distributed energy resources
 - Deliver other energy services
 - Reduce or stabilize customer electric bills

Be it further resolved that a primary Community Choice Energy organization objective will be to reduce greenhouse gas emissions through the purchase of electricity from green renewable sources, provision of energy efficiency services and the development of local renewable distributed energy resources.